



RED ANGUS ASSOCIATION OF AMERICA

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Issue Paper DNA Verification for Genotypic Eligibility for Approved Beef Programs Claiming "Angus" Influence

BACKGROUND

In recent years, the beef industry has seen a dramatic increase in consumer demand and confidence for branded beef products; especially "Angus" beef product lines. Currently there are in excess of ~~40~~ 46 Angus products recognized by USDA. As the demand for "Angus" beef continues to flourish, it is important to provide consumers with these desired products through expansion of the current system for identifying eligible "Angus" carcasses. This expansion should include a method for the accurate identification of animals that are of "Angus" genetic composition, but do not meet existing USDA specifications.

Currently, USDA Schedule GLA provides two methods for identifying cattle that are eligible to supply "Angus" branded beef product lines. The phenotypic method requires only that an animal must have a minimum of 51 percent black-hide to qualify for Angus product lines. The other method is genotypic, which documents the genetic make-up of individual animals. This USDA audited process is conducted by breed associations, which utilize pedigree information to document at least one registered Angus sire and/or dam, thus, providing traceability to a minimum of 50 percent "Angus" bloodlines. Under the genotypic specification, red-hided Angus cattle, that are not eligible for Angus under the phenotypic, or 51% black hide, specification, are eligible for Angus product lines.

Still, there are cattle which genetically are Angus; however, ~~they~~ they are not eligible for Angus product lines under either of the current USDA Schedule GLA methods.

For example: Several breed associations register 50 percent Angus hybrids; these Angus derivative cattle are 50 percent Angus, and may have either red or black hide color. When an Angus hybrid bull is mated to an Angus hybrid female, the

resulting calf is still 50 percent Angus; just like its two parents. If it is black hided it automatically is eligible to supply Angus product lines under the phenotypic specification. However, if that same calf is born with a Red hide, it is not eligible under the phenotypic specification; it doesn't have a 51% black hide. It also would not qualify under USDA's genotypic specification, as it wouldn't have a registered purebred Angus parent (red or black).

ISSUE

Many breeding programs employed by cattle producers are utilizing Angus derivatives to produce calf crops that are genetically equal to, or surpass a threshold of, 50 percent "Angus" bloodlines. While there are recognized USDA Process Verified Programs that document the parentage of cattle born of at least one registered purebred Angus parent, these systems deny access to the offspring of "Angus" derivative seedstock - even when those cattle exceed 50% "Angus" bloodlines. Producers of these "Angus" cattle argue that the technology is available to verify the "Angus" genetics in their cattle. However, that technology is not currently an acceptable means of documentation by USDA.

~~That technology is DNA testing. Angugen, a DNA genetic verification test offered by Viagen, can be utilized to determine the "Angus" genetics in cattle or pens of cattle. Such a test~~ could be especially useful in documenting the Angus genetics of cattle not eligible for Angus product lines through either the existing phenotypic or genotypic methods. Industry use of this test could result in an even larger supply of genetically documented Angus being available to meet the growing demand for "Angus" product lines.

DNA testing to verify Angus can provide equal access to Angus product lines for those producers whose Angus cattle "fall through the cracks" of the current USDA specifications. Just like USDA's existing genotypic specification for Angus, DNA verification of Angus will ensure that the beef consumers purchase as Angus is just that...Angus beef.

The Red Angus Association of America, (RAAA) has a 50 year history of embracing technology which enhances the reliability of our industry's beef production. It is with the well-being of beef producers and consumers in mind that the Red Angus Association of America recommends adding DNA verification as an additional means of genetically documenting "Angus" cattle as a method USDA should incorporate into the Schedule GLA.